

Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1. (Previously Presented) A process for preparing cyclododecene, comprising:
contacting at least one starting material selected from the group consisting of cyclododecatriene, cyclododecadiene and mixtures thereof, in the gas-phase with a catalyst in a fixed-bed reactor in the presence of hydrogen, thereby preparing said cyclododecene product,

wherein the Bodenstein number in the fixed-bed reactor is greater than 100.

Claim 2. (Original) The process as claimed in claim 1, wherein the Bodenstein number for the process in the fixed-bed reactor is greater than 500, in particular greater than 1000.

Claim 3. (Original) The process as claimed in claim 1, wherein the Reynolds number is greater than 10.

Claim 4. (Previously Presented) The process as claimed in claim 1, wherein the throughput per amount of catalyst ranges from 15 to 500 g, of at least one starting material selected from the group consisting of cyclododecatriene, cyclododecadiene and mixtures thereof per gram of Pd•h.

Claim 5. (Original) The process as claimed in claim 1, wherein the catalyst is in the form of a shaped body.

Claim 6. (Previously Presented) The process as claimed in claim 1, wherein the catalyst is in the form of a shaped body and the shaped body comprises more than 90 % by weight of support material, based on the total weight of the shaped body.

Claim 7. (Original) The process as claimed in claim 1, wherein the catalyst is in the form of a shaped body and the shaped body is essentially round.

Claim 8. (Original) The process as claimed in claim 1, wherein the catalyst is in the form of a shaped body and has a diameter of more than 0.5 mm.

Claim 9. (Original) The process as claimed in claim 1, wherein the catalyst is present on a support material and is in the form of a shaped body comprising γ -aluminum oxide.

Claim 10. (Original) The process as claimed in claim 1, wherein the catalyst is present on a non-metal support material.

Claim 11. (Original) The process as claimed in claim 1, wherein the catalyst is in the form of a shaped body and comprises at least one finely divided, catalytically active metal of group VIII of the Periodic Table of the Elements.

Claim 12. (Original) The process as claimed in claim 1, wherein the distribution of the catalytically active metal in the shaped body is not homogeneous.

Claim 13. (Previously Presented) The process as claimed in claim 1, wherein the shaped body has an outer layer having a thickness of not more than 1/10 of the maximum

dimension of the shaped body, and more than 70 % by weight of the catalytically active metal is present in this layer.

Claim 14. (Original) The process as claimed in claim 1, wherein the catalyst comprises catalytically active palladium.

Claim 15. (Previously Presented) The process as claimed in claim 1, wherein the molar amount of hydrogen ranges from 0.9 to 1.2 times the amount required to hydrogenate the theoretical amount of cyclododecatriene and cyclododecadiene to cyclododecene.

Claim 16. (Currently Amended) The process as claimed in claim 1, wherein the contacting is carried out at a temperature in the range of ~~from~~ 90 to 180° C.

Claim 17. (Original) The process as claimed in claim 1, wherein the contacting is carried out under an inert gas.

Claim 18. (Original) The process as claimed in claim 1, wherein the contacting is carried out in the presence of hydrogen and carbon monoxide.

Claim 19. (Original) The process as claimed in claim 1, wherein the contacting is carried out in the presence of hydrogen, carbon monoxide and at least one inert gas.

Claim 20. (Original) The process as claimed in claim 1, further comprising:
vaporizing the starting material in an inert gas atmosphere.

Claim 21. (Previously Presented) The process as claimed in claim 1, wherein the total pressure in the gas phase ranges from 50 to 10,000 hPa.

Claim 22. (Previously Presented) The process as claimed in claim 1, which is carried out continuously.

Claim 23. (Original) The process as claimed in claim 1, wherein the Bodenstein number is greater than 1,000.

Claim 24. (Original) The process as claimed in claim 1, wherein the Reynolds number is greater than 100.

Claim 25. (Previously Presented) The process as claimed in claim 24, wherein the Reynolds number is greater than 200.

Claim 26. (Previously Presented) The process as claimed in claim 1, wherein the throughput per amount of catalyst ranges from 20 to 100 gm of at least one of cyclododecatriene or cyclododecadiene/g Pd•h.

Claim 27. (Original) The process as claimed in claim 1, wherein the catalyst is in the form of a spherical shaped body.

Claim 28. (Original) The process as claimed in claim 1, wherein the catalyst is in the form of a shaped body having a diameter of more than 2 mm.

Claim 29. (Currently Amended) The process as claimed in claim 1, wherein the contacting is carried out at a temperature in the range of ranging from 100 to 160° C.

Claim 30. (Original) The process as claimed in claim 1, wherein the contacting is carried out in the presence of hydrogen and an inert gas comprising nitrogen.

Claim 31. (Original) The process as claimed in claim 1, wherein the contacting is carried out in the presence of hydrogen and an inert gas comprising nitrogen and carbon monoxide.

Claim 32. (Previously Presented) The process as claimed in claim 1, which is carried out under plug flow conditions.